

ESO No. 148

The U. S. Market Economy: Past
Trends, Future Projections, and Areas
of Growth*

by

Dennis R. Henderson**

April, 1973

Department of Agricultural Economics & Rural Sociology
The Ohio State University
In Association with The Ohio Cooperative Extension Service

* Data contained herein are based upon various reports from the U. S. Department of Commerce; Office of Business Economics; National Planning Association; The Conference Board, Inc.; The Ohio Outlook Guide; and the author's calculations.

** Assistant Professor, Department of Agricultural Economics and Rural Sociology, The Ohio State University, Columbus, Ohio

TABLE OF CONTENTS

	<u>Page</u>
INCOME, INFLATION AND EXPENDITURE.....	1
(Charts 1-6)	4
POPULATION AND EMPLOYMENT	10
(Charts 7-12)	13
OCCUPATIONS, EDUCATION, AND AREAS OF ABOVE-AVERAGE ECONOMIC GROWTH	19
(Charts 13-20)	21

I. INCOME, INFLATION AND EXPENDITURE

(Comments on Charts 1-6)

The Gross National Product (GNP) reflects the spending by consumers, businessmen and government and is, in essence, the national income. That is, the GNP is the sum of all expenditures within our economy on goods and services produced therein and is an aggregate indicator of the total economic activity in the U. S. Since the early 1930's the GNP has steadily increased due to two factors: increasing productivity and inflation.

During the mid-60's the GNP grew steadily at an average rate of about nine percent per year. In 1968 the economy headed into a mild recession that lasted into 1971. During this period the rate of growth in the GNP slowed to three to four percent per year. Aided by expansionary policies by the Federal government and increased consumer confidence, the GNP expanded at a rapid ten percent pace in 1972, the first full post-recession year. The post-recession boom is expected to moderate somewhat in late 1973 or early 1974 as pre-recession inventory levels are rebuilt and as capital spending overcomes recession-related depletion, but growth will likely return to somewhere around the pre-recession rate of nine percent per year for the next few years.

Increase in prices, or inflation, has been an important factor in the GNP in recent years. One measure of the rate of price increase is the Consumer Price Index (CPI) which measures the rate of change in the prices of a representative group of consumer-purchased goods and services. Through the mid-1960's the CPI increased at an average annual rate of two to three percent. However, beginning in 1967 it began to increase rapidly, hitting a high of 6.5 percent in 1970. Prime factors behind this inflationary spiral were large federal government spending deficits and large wage increases. Through use of rigid price and wage controls, the inflation rate was cut to 2.9 percent in 1972. However, continued deficit spending by the Federal government, rapidly increasing money supply, strong consumer demand, and large post-freeze wage increases are expected to push up prices at a rate exceeding 4 percent per year by 1975.

When the GNP is adjusted to "constant" dollars by removing the effects of price increases, the "real" GNP is revealed. This has grown somewhat less dramatically since 1968, and actually decreased during the recession year of 1970. From 1968 to 1971 it averaged less than a 2 percent annual increase. In 1972, however, "real" GNP increased at a rapid 7 percent and 5-6 percent growth is expected in 1973 and 1974, followed by a somewhat smaller rate as productivity increases slow due to factors such as environmental conservation and energy limitations.

Three expenditure categories account for the disposition of most of the national income: personal consumption expenditures (about 64 percent of the total), government expenditures (about 22 percent of total), and private domestic investment (about 13 percent of total). The relative importance of each has changed very little over the recent past, with government expected to increase somewhat faster in the next few years (to about 25 percent in 1975) as an increasing share of goods and services are provided in the public sector.

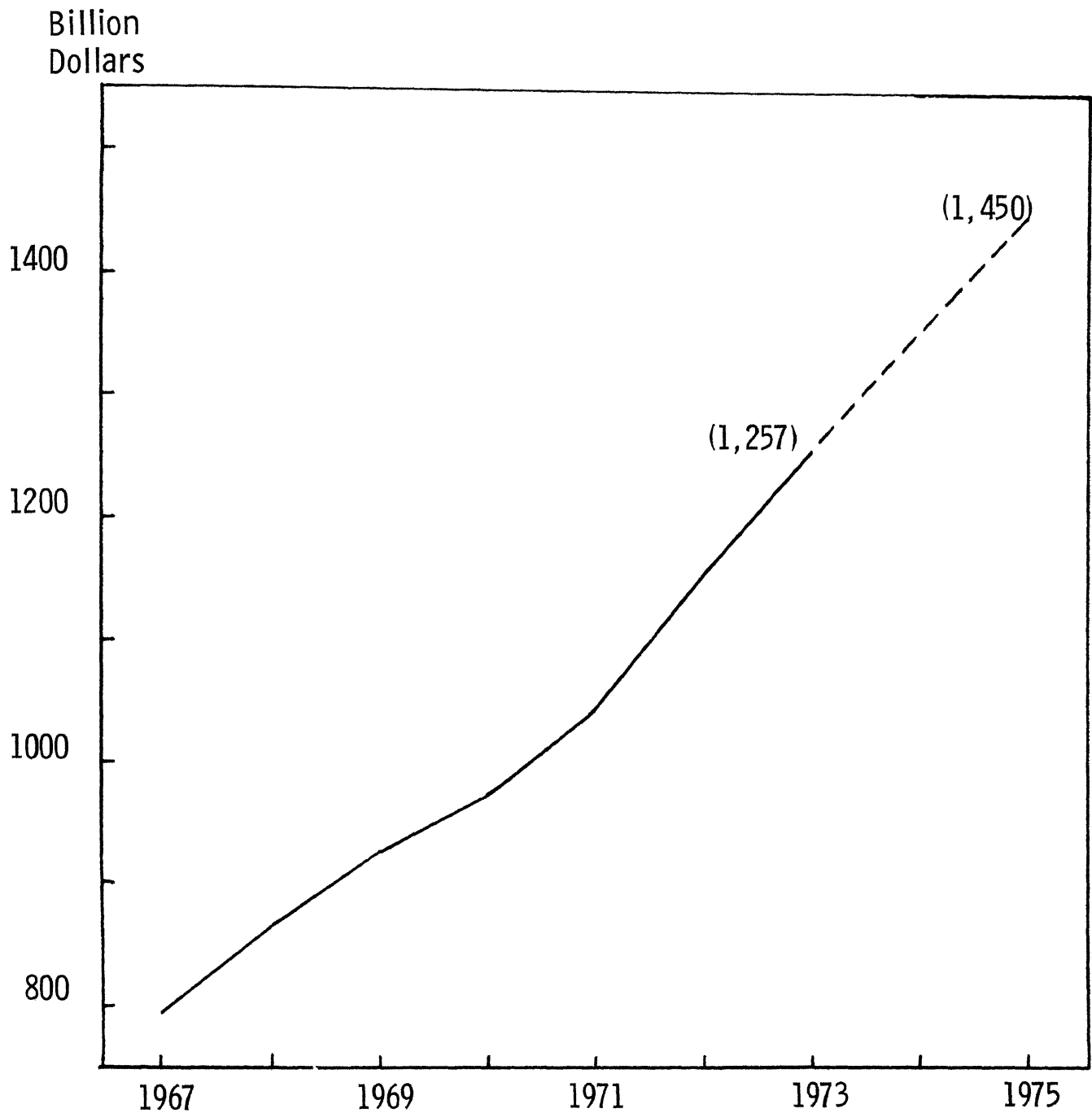
In 1968 total expenditures by state and local governments exceeded those of the Federal government to set a trend that has continued and is expected to accelerate in the future due to revenue sharing and an increased demand for community services such as waste disposal and education. While federal expenditures are expected to increase at about an average of 6 percent per year, state and local spending will likely increase by more than double that rate. One factor helping to moderate the increase in federal expenditures is an expected net decrease in outlays for national defense, reflecting the winding down of armed conflicts in Southeast Asia and a general shifting of national priorities to domestic problems.

Construction and durable production equipment constitute private domestic expenditures, with both residential and industrial structures included in the former. Throughout the recession, until 1972, expenditures on production equipment remained fairly constant, being limited largely to replacement spending. With the post recession recovery, however, these expenditures rose rapidly as new productive capacity was added to our economic plant. This upward trend should continue strong through 1974 when inventory build-ups begin to peak-out.

Throughout the recession, construction expenditures trended upward due entirely to strong demand for residential housing in response to an increasing number of family formations as post World War II babies reached marriage age. Construction of residential structures expanded rapidly during the recession years of 1970 and 1971, and this sector gave strong leadership to the post-recession recovery. As family formations should continue at a high pace, strength in this sector should continue .

Up until the current decade, consumer expenditures on non-durables such as food and utilities accounted for the single largest category of consumer spending. However, in the 1970's the U. S. will evolve into a service-oriented economy as consumers, with more income, demand an increasing array and quantity of services relative to durable and non-durable goods. For the 1968-1980 period, early indicators show an average annual increase in consumer expenditures of about 7.8 percent compared to about 6.5 percent for consumer durables and 5.6 percent for non-durables. Savings are expected to remain at about 6-8 percent of disposable personal income, thus, increasing in proportion to personal expenditures.

GROSS NATIONAL PRODUCT (GNP)

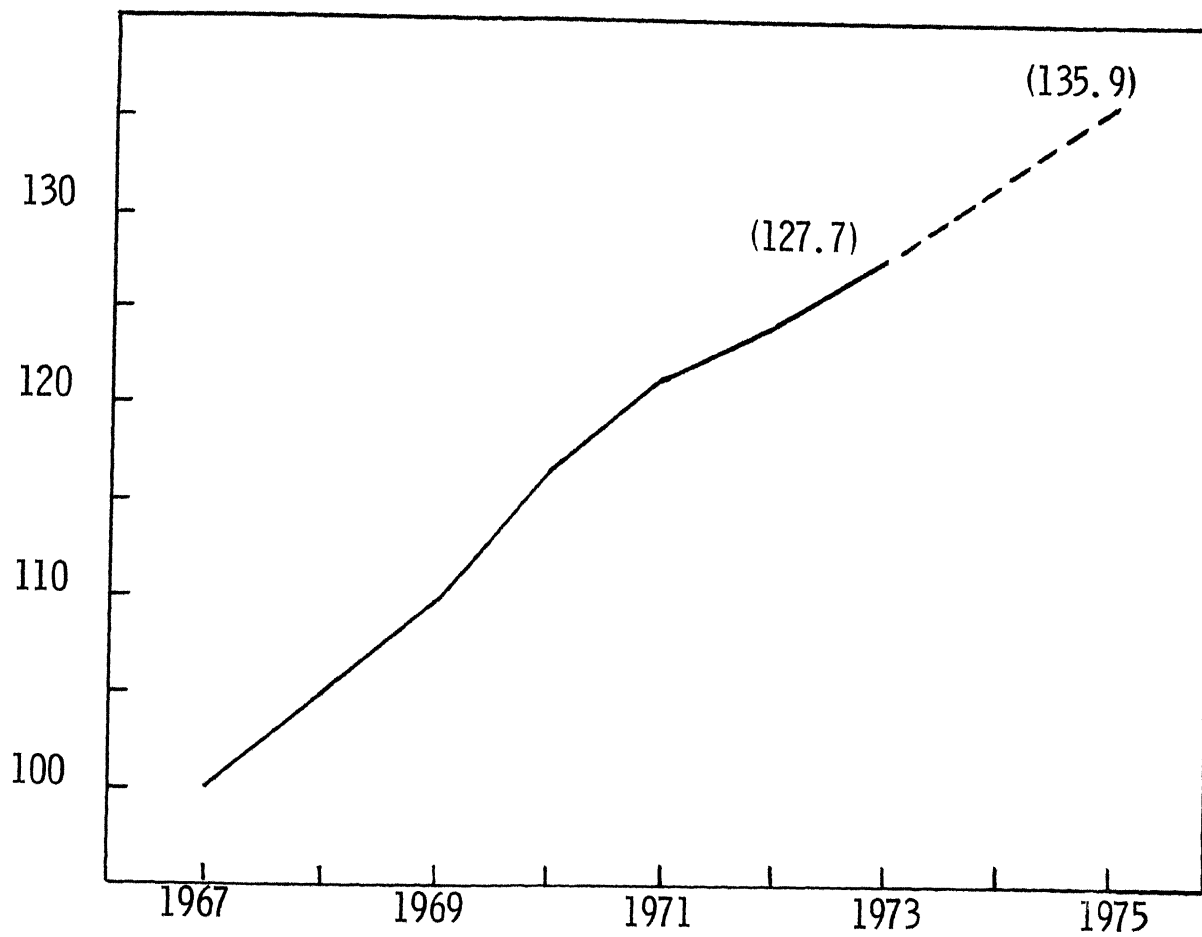


GNP IS THE VALUE OF ALL SERVICES PERFORMED PLUS ALL GOODS PRODUCED IN THE ECONOMY, AND IS THE NATIONAL PRODUCT.

Chart 2

GENERAL PRICE LEVEL
CONSUMER PRICE INDEX (CPI)

1967 = 100



ANNUAL RATE OF INFLATION

Percent

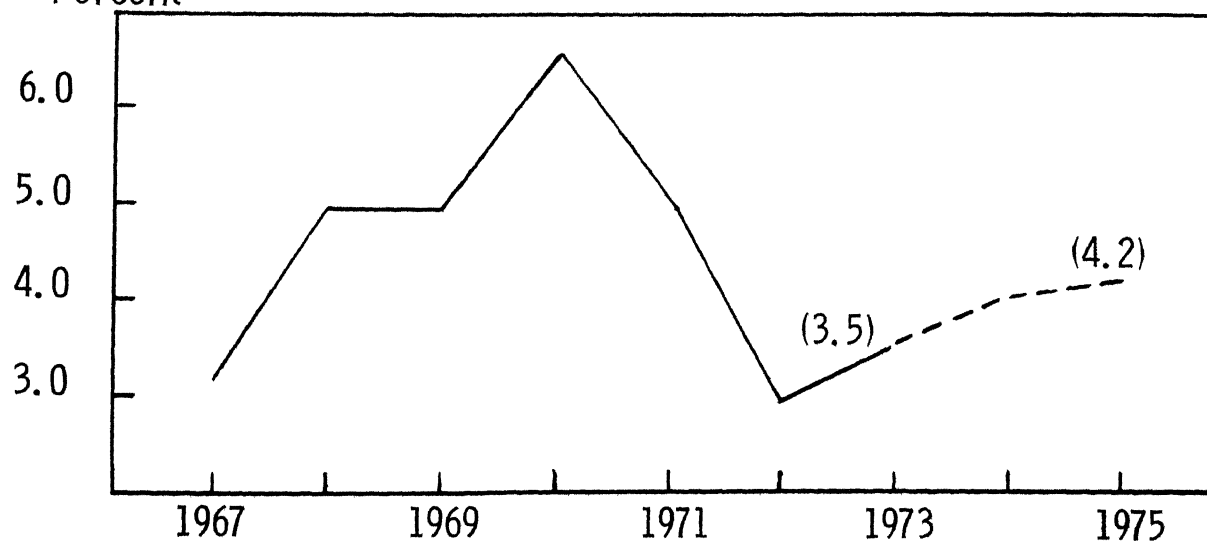


Chart 3

REAL NATIONAL INCOME (IN CONSTANT 1967 DOLLARS)

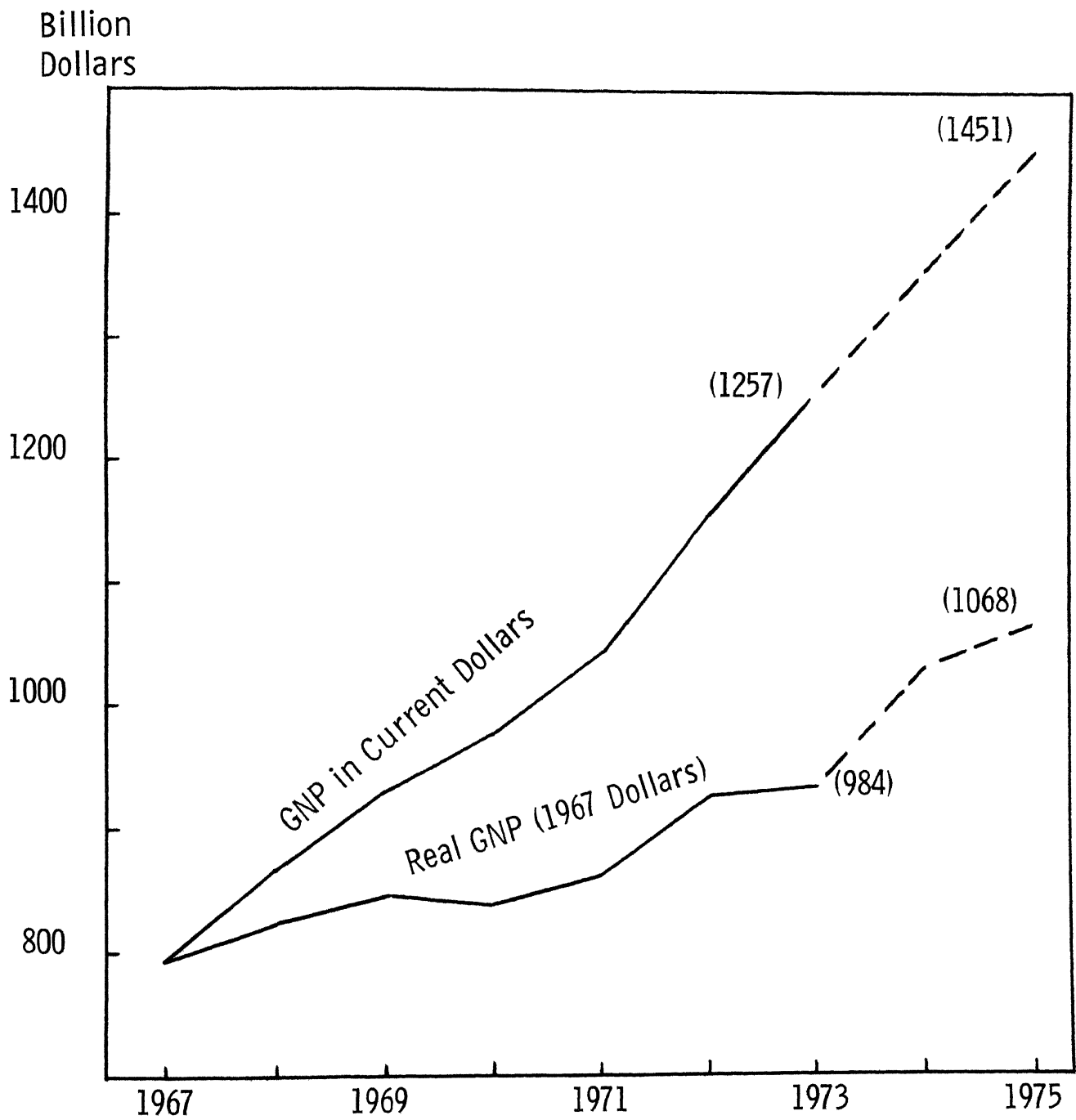


Chart 4

WHERE THE NATIONAL INCOME GOES . . .

Billion Dollars

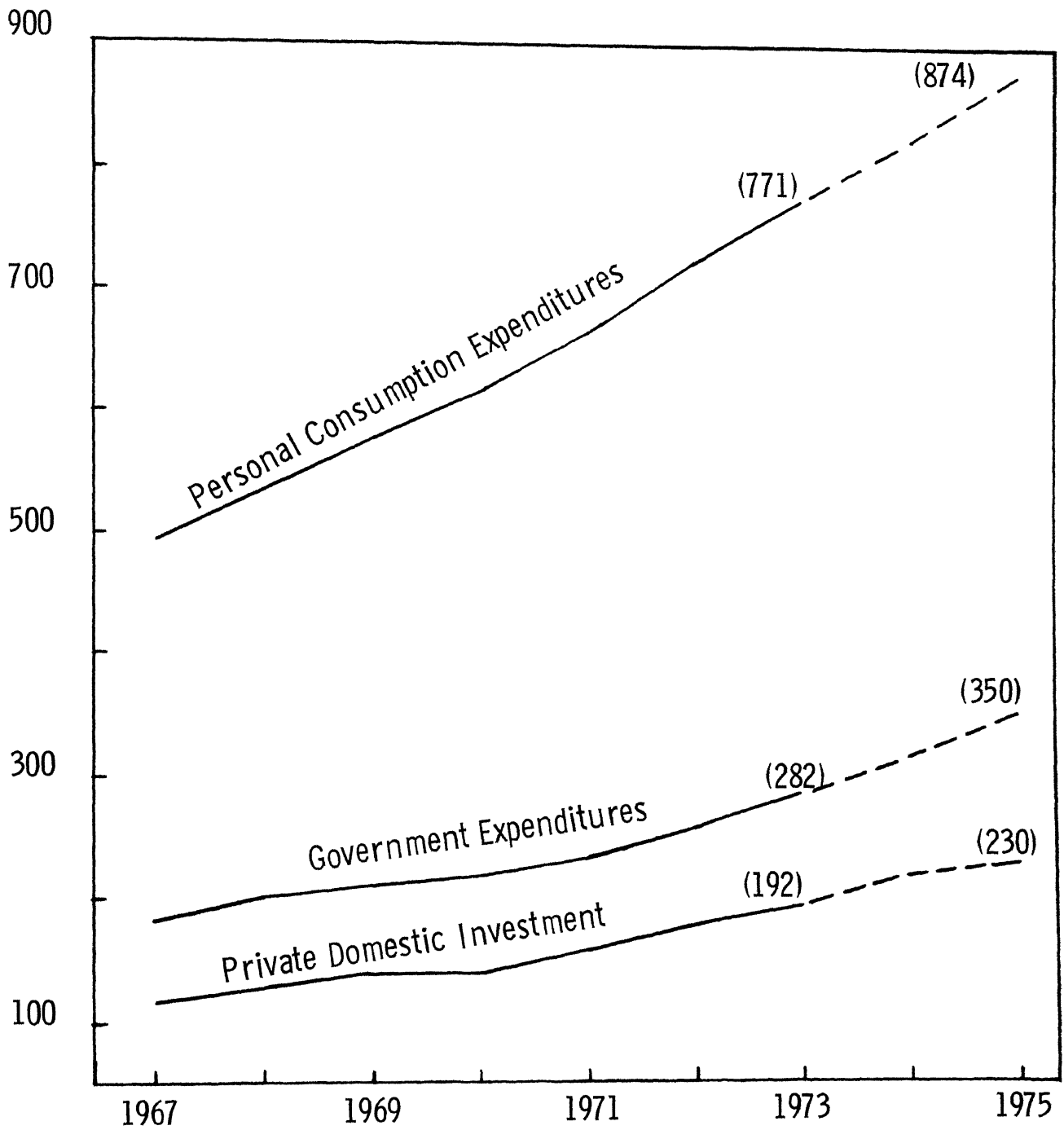
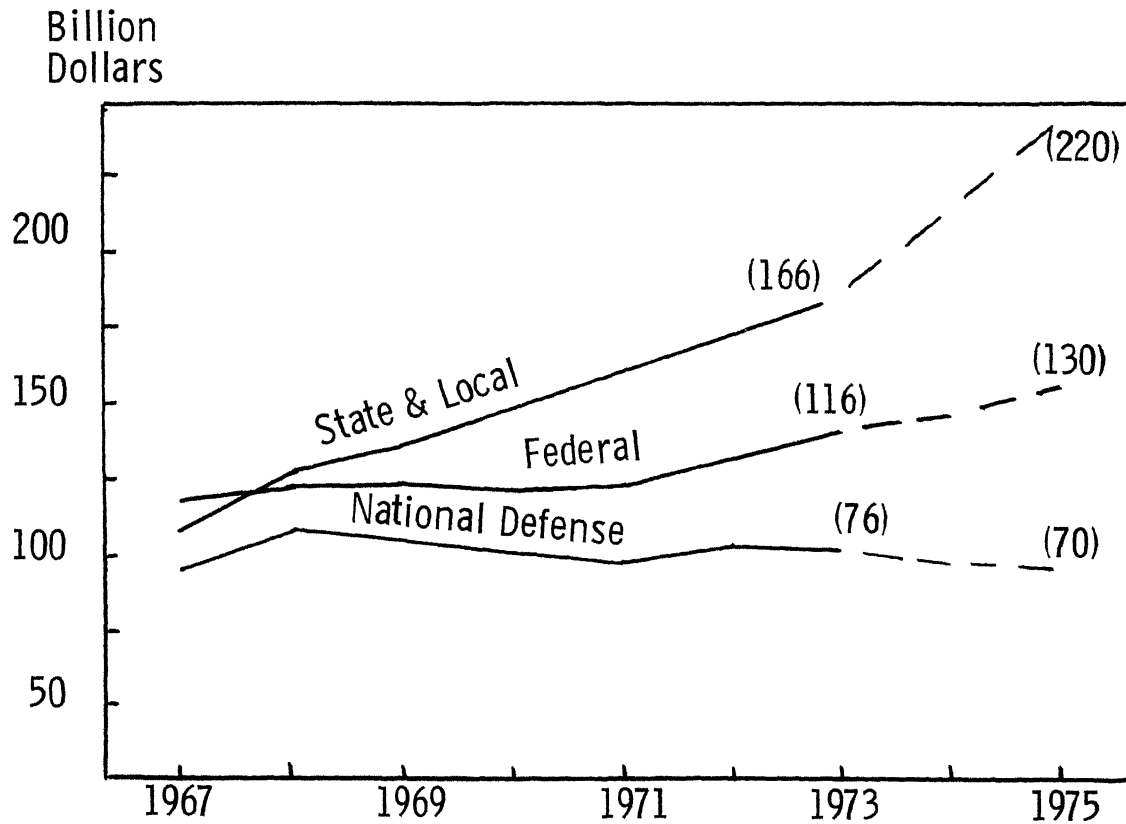
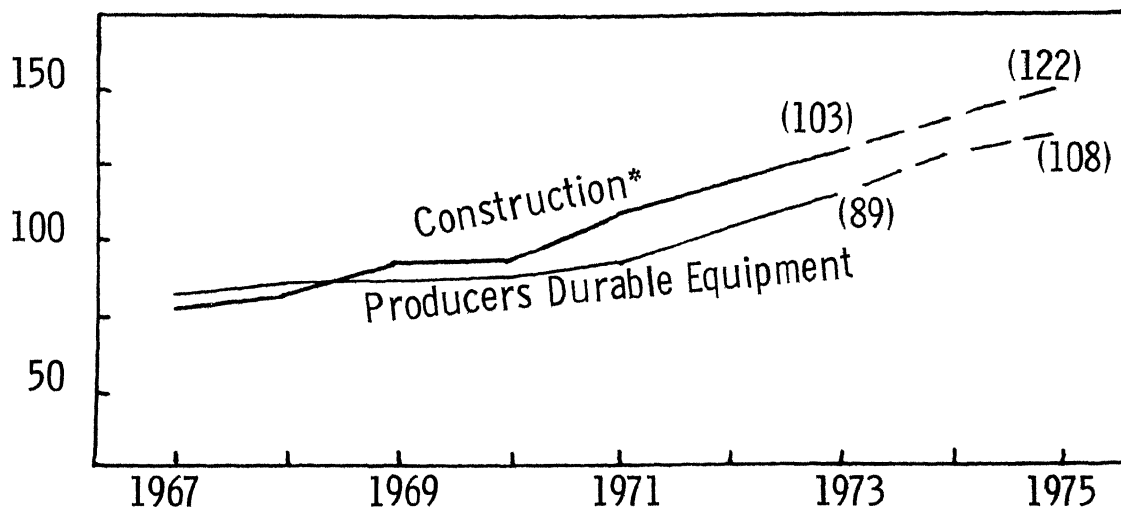


Chart 5

WHERE THE GOVERNMENT EXPENDITURES GO . . .



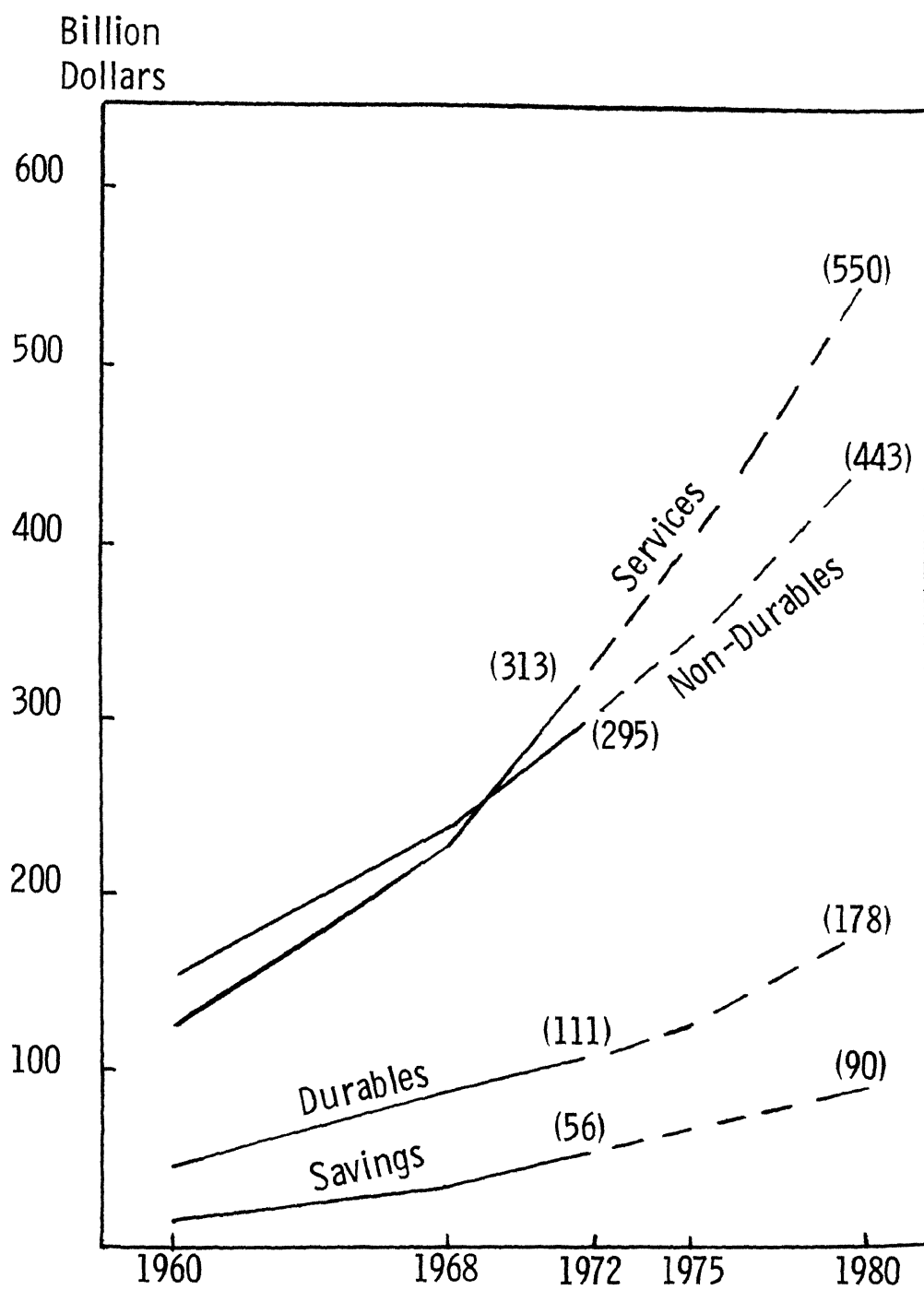
AND PRIVATE DOMESTIC INVESTMENT . . .



* Includes both residential and non-residential structures.

Chart 6

DISPOSITION OF PERSONAL INCOME . . .



II. POPULATION AND EMPLOYMENT

(Comments on Charts 7-12)

The size and composition of the population is of major interest as people provide both the major production resource, labor, to our economy and are the source of the ultimate demands for which all economic activity is undertaken. The total population of the U. S. is expected to increase from about 210 million in 1972 to about 230 million in 1980. This represents an average annual increase of about 1.3 percent, about the same rate of growth as experienced during the 1960's.

Important changes will occur in the age structure of the population. An expected net reduction in the birth rate, coupled with the impact of a lower birth rate in the 1960's compared to the prior decade, will bring about a relative decrease in the share of the population in the 0-14 year-old group. Likewise, the sectors of our economy that primarily serve this age group are expected to experience below average growth. The largest relative increase in the population will be in the 15-44 year-old segment, paced by a 20 percent increase in the size of the 25-34 age group and a 50 percent gain in the 20-24 age segment as persons born during the post World War II baby boom reach these age levels. It is among persons in these age groups that we typically find activities associated with higher education, family-unit formation, and the like. The 45-64 year-old segment will decline slightly in relative size, reflecting the decreased birth rate in the early 1930's, while the relative size of the 65 and over age group will increase somewhat as life expectancy continues to lengthen.

Numbers of marriages are important to projections of other aspects of population and economic growth. Following marriage, young people form households and have children. Birthrates, number of families, and number of women in the work force are effected. In the past ten years, the number of marriages per year steadily increased, with a total of 17.4 million occurring during the 1960's. The number of marriages is expected to continue to increase throughout the 1970-80 period as the relatively large increase in numbers of people of marriageable age materializes. Overall, about 23 million marriages are expected between 1970 and 1980.

Despite the steady increase in number of marriages during the 1960's, the annual number of births declined throughout the decade as changing attitudes toward family planning and improved birth control measures surfaced. During the economic recession in 1970-71 the number of births fell to a recent low of 3.2 million per year, with a birth rate of about 15.5 per 1000 people in the total population, after maintaining a rate of 18 per 1000 or higher during the 1960's. The birth rate is expected to recover somewhat from its recession low during the 1970's--to around 16.4 per 1000 by 1980--but will not achieve the high levels of earlier periods due to continued efforts at family planning. This reduced birth rate is the prime factor behind the relative decrease in the share of the population in the under 15 year-old group.

The increased number of marriages expected in the 1970's along with the large increase in population in the 15-44 age group will result in a steady increase in the number of families in the U. S. It is expected that there will be about 9 million more family units in 1980 than in 1970, compared to about a 7 million gain in the prior ten year period. Additionally, mass affluence is expected to emerge during the 1970's as larger earnings shift more families from lower earning levels to the middle income brackets. The average family had an annual income of about \$9400 in 1970. By 1980 this should increase to more than \$13,500. At the same time, more families will have higher incomes as the share of all families with annual incomes greater than \$10,000 is likely to increase from 27 percent in 1960 and 47 percent in 1970 to 64 percent by 1980. At the same time the share of families with annual incomes below the \$5,000 poverty level is expected to fall to 13 percent by 1980, down from 19 percent in 1970 and 29 percent ten years earlier. More families with more income suggest strong economic activity in the sectors associated with the goods and services demanded and provided by the affluent family unit.

The total labor force will continue to grow as the population expands, but at a somewhat faster pace due to the relatively large increase in young people. Most of the growth will be concentrated in the 20-34 year-old group, with smaller increases in the number of older people in the labor force than in their total numbers due to earlier retirements. Thus, there will be a relative decline in the share of the labor force from which experienced workers and managers can be drawn and a relatively large increase in those groups which are comparatively inexperienced. This will generate increased need for formal training

of the labor force, particularly at the technical and managerial levels. Overall, unemployment is expected to level out at around the 5 percent level, up somewhat from the late 1960's as a larger stock of employable people float between jobs due to increased job mobility and higher technical requirements and qualifications lengthening search time between jobs. Female employment is expected to level out at around 38 percent of the labor force, consistent with the rates of marriages and births, both of which tend to stabilize the relative size of the female labor force.

Chart 7
U. S. POPULATION

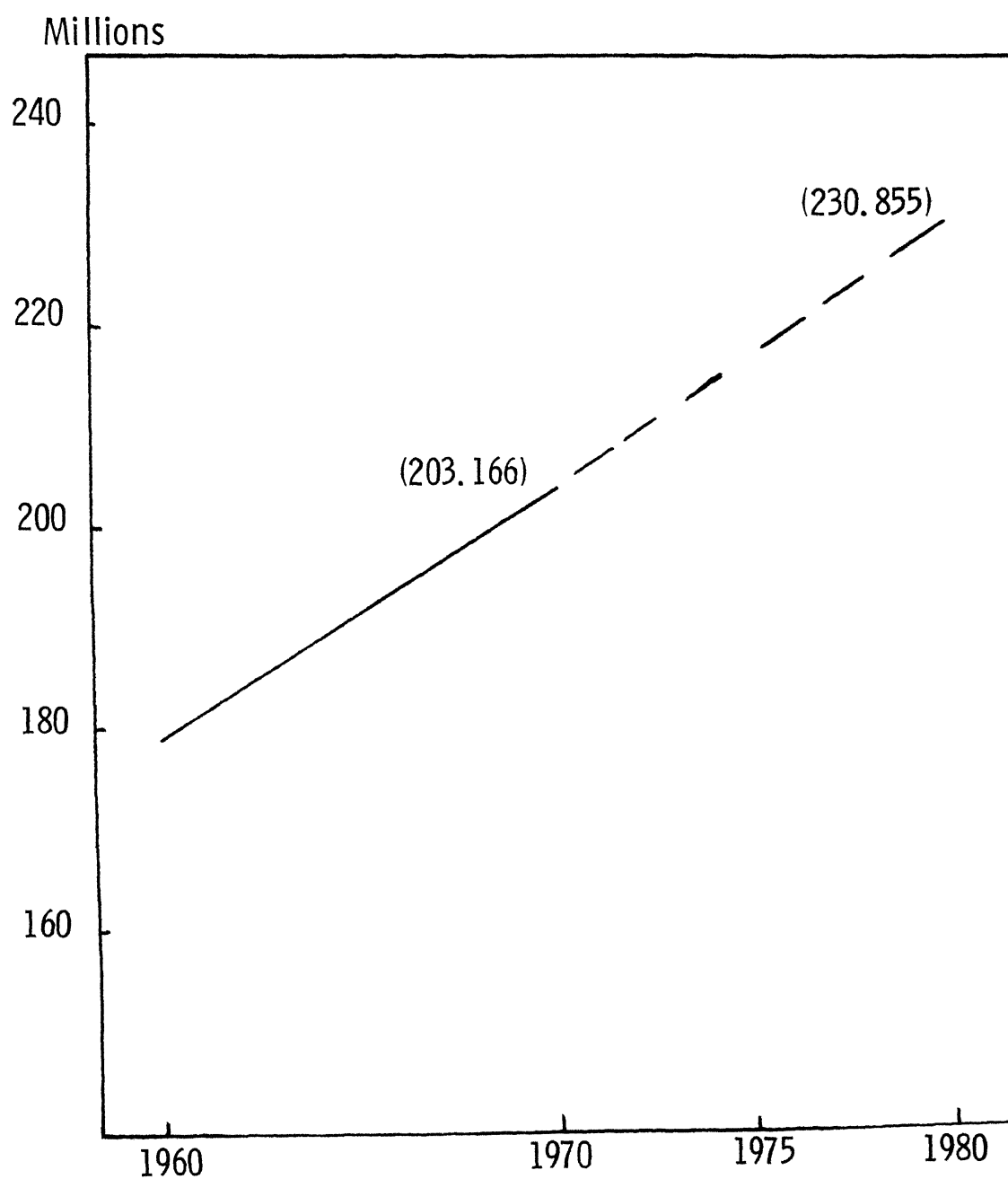


Chart 8

DISTRIBUTION OF POPULATION BY MAJOR AGE GROUPS

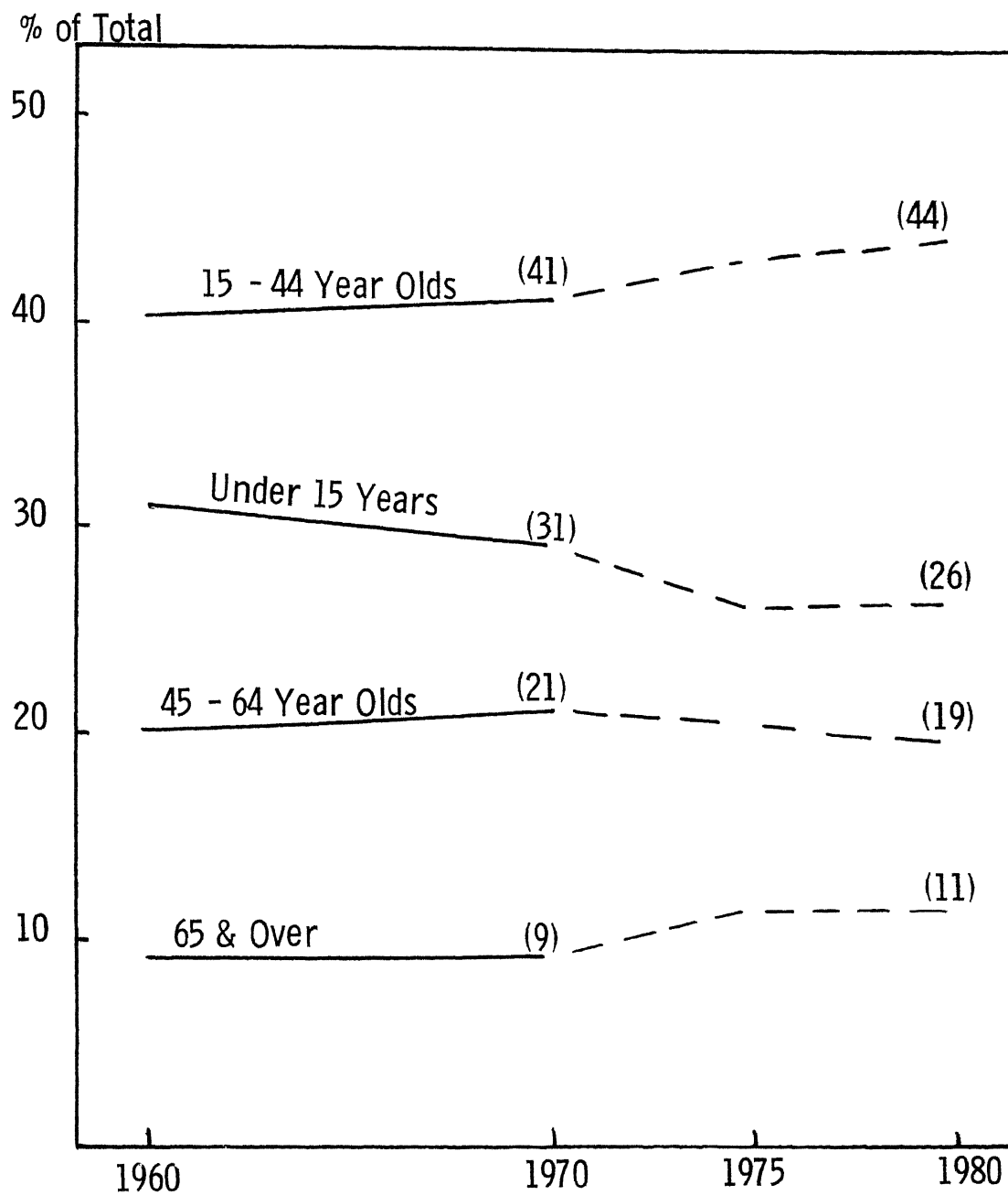


Chart 9

NUMBER OF MARRIAGES IN THE U. S., PER YEAR

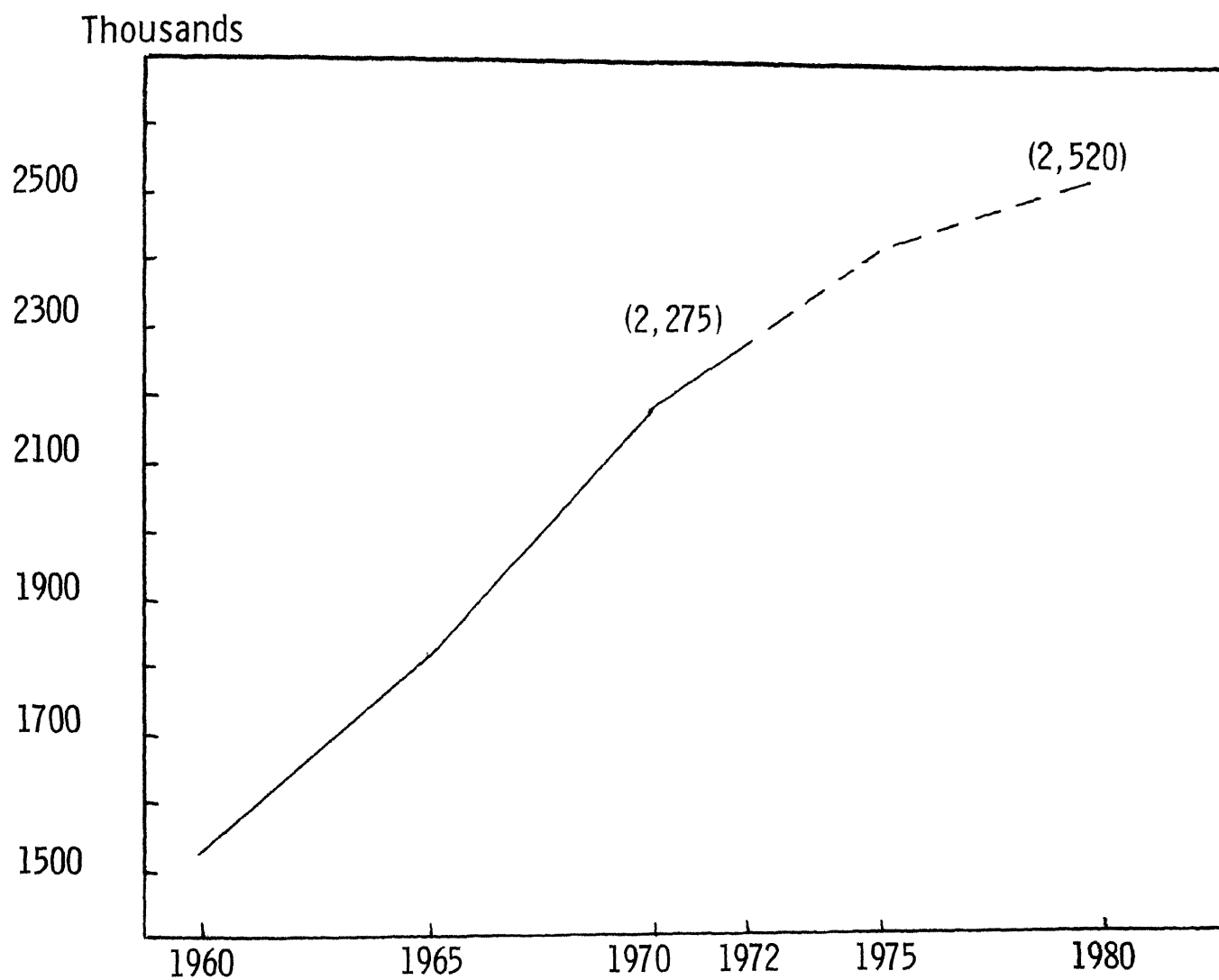
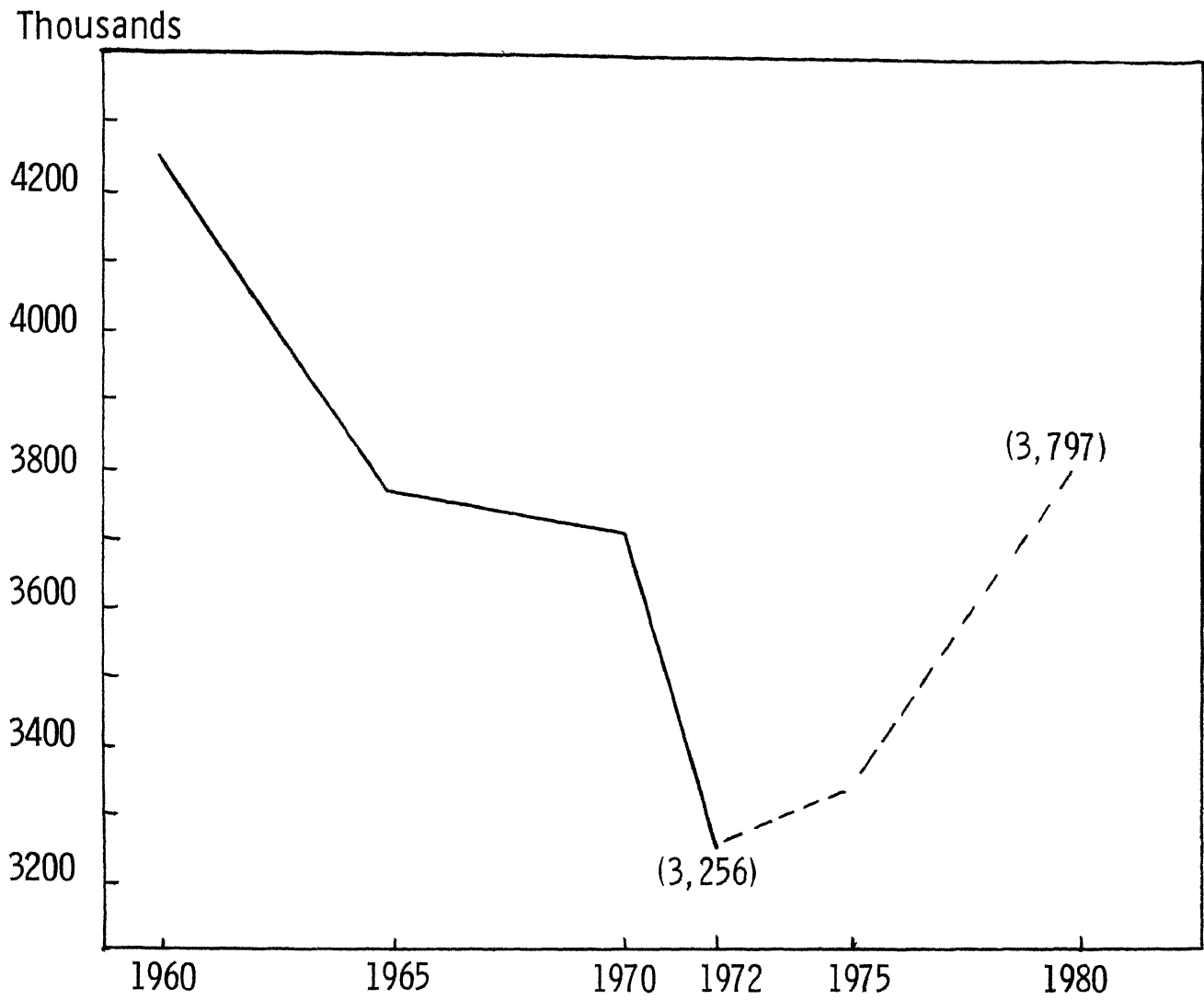


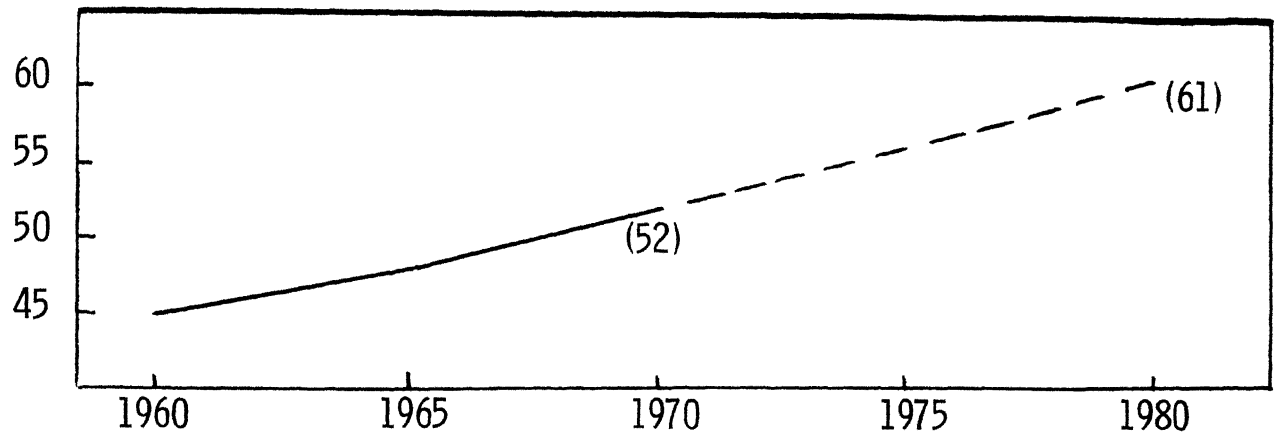
Chart 10

NUMBER OF BIRTHS IN THE U. S., PER YEAR



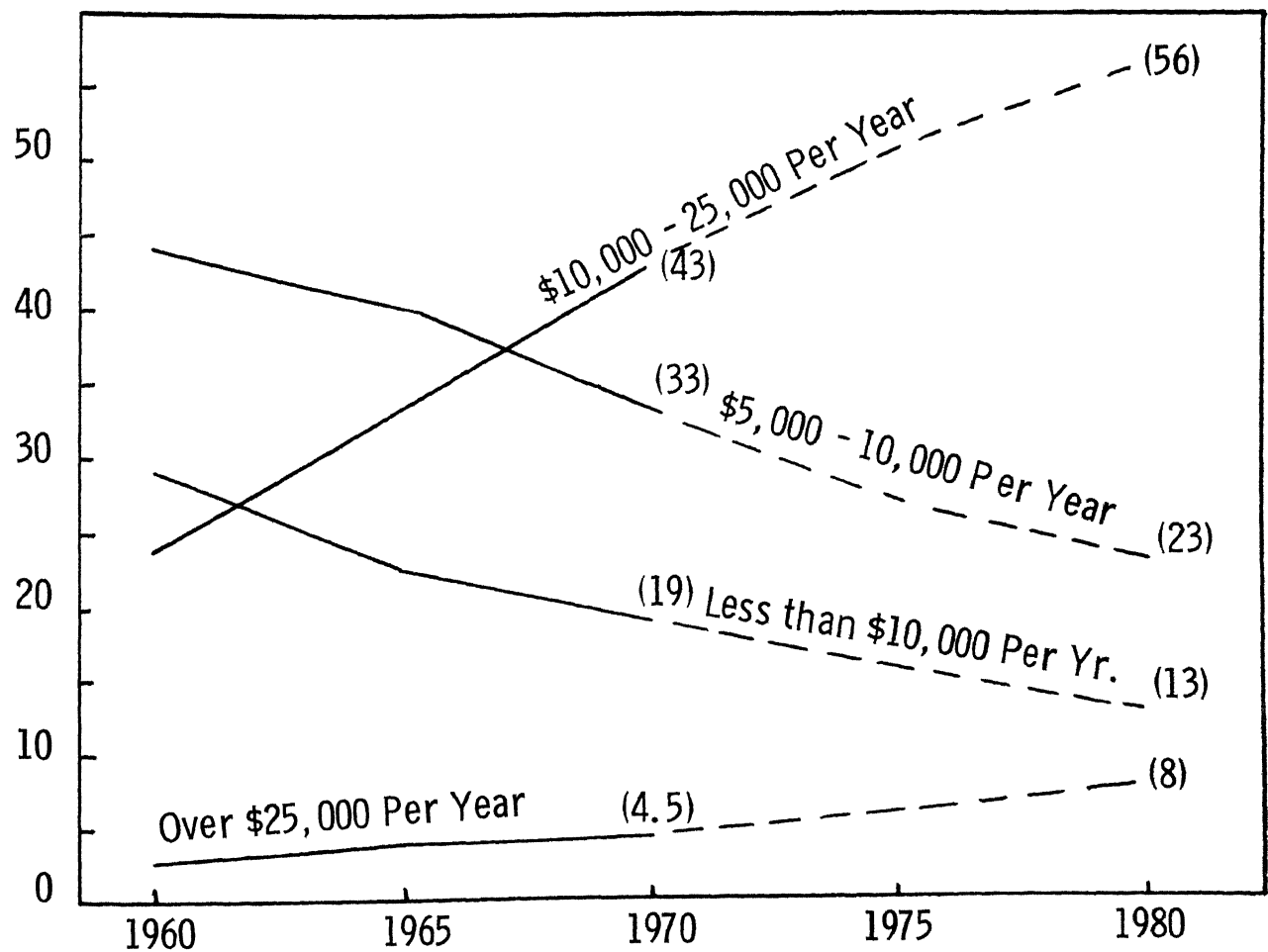
NUMBER OF FAMILIES IN U. S.

Millions



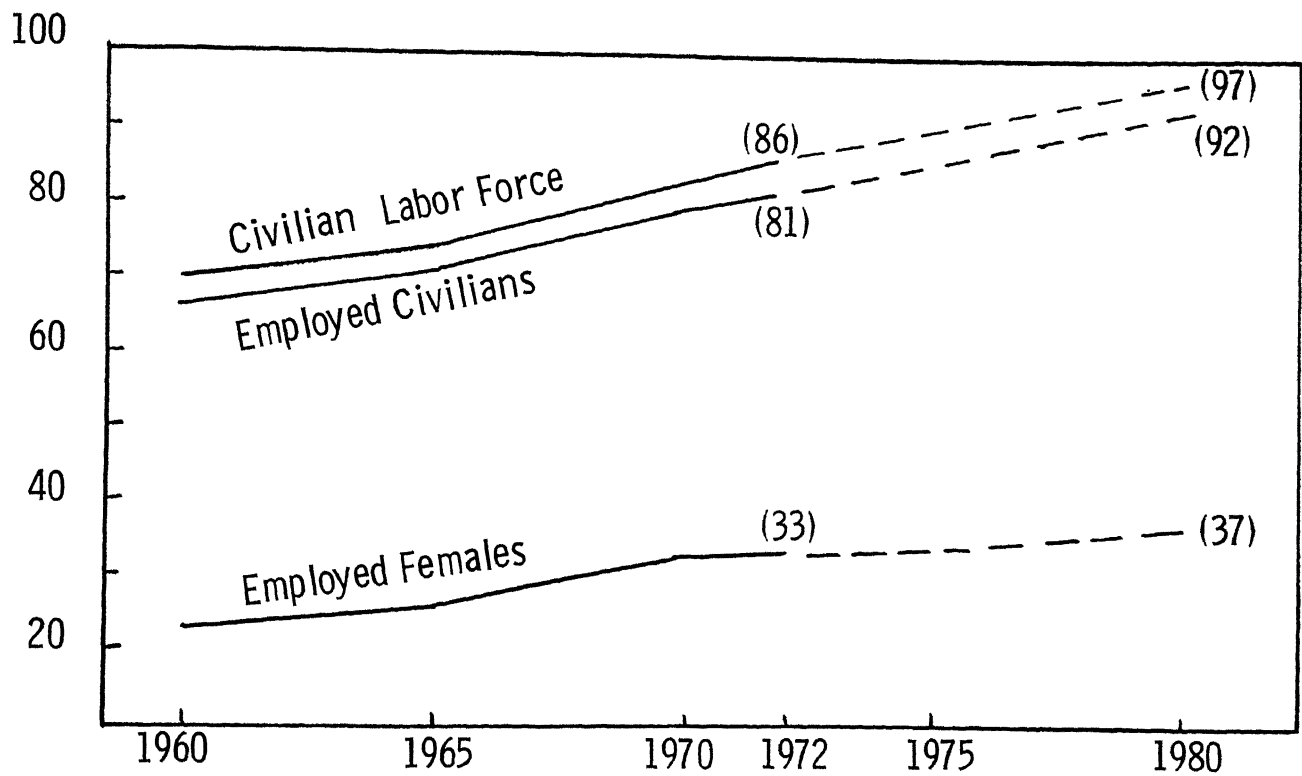
DISTRIBUTION OF FAMILIES BY INCOME

% of Total



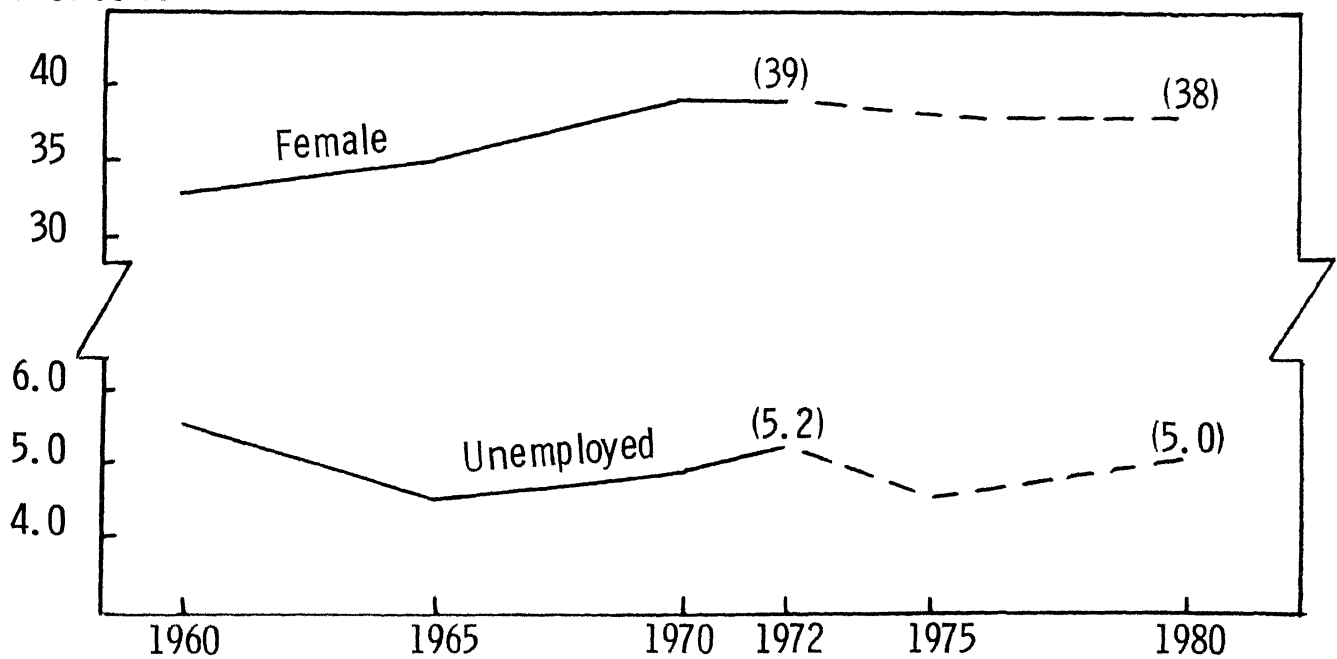
EMPLOYMENT IN THE U. S.

Millions



FEMALES & UNEMPLOYED AS PERCENT OF LABOR FORCE

% of Total



III. OCCUPATIONS, EDUCATION, AND AREAS OF ABOVE-AVERAGE ECONOMIC GROWTH

(Comments on Charts 13-20)

The occupational structure of the labor force in the U. S. has been continually changing as a result of basic changes in technology and administrative requirements. As the economy increases in technical sophistication and as scientific industrialization expands, laborers are replaced by technical experts, administrators, managers, and professionals. At the end of World War II, blue collar workers exceeded white collar workers in numbers by about 15 percent. By 1971, the number of persons holding white collar positions was about 40 percent greater than the number of blue collar workers, and by 1980 is expected to be 55 percent larger. During the 1970's about 60 percent of the total increase in employment will occur in white collar positions, about 15 percent among blue collar workers, and about 25 percent among service workers. The number of farm workers actually declined by about one million between 1965 and 1971, and a further decline of about 0.5 million is expected by 1980 as mechanical harvesting and other technological innovations continue to be adopted in agriculture.

Among the white collar occupations, in the past decade the fastest growth has occurred in the professional and technical and clerical categories. Growth in these occupations is expected to accelerate during the 1970's, accounting for about 80 percent of the increased white collar employment. Sales persons and managers, officials and proprietors will each likely account for about 10 percent of the employment growth. Among the blue collar occupations, literally all of the growth will occur in the semi-skilled and operating-type jobs and among the foremen and skilled workers. An absolute decrease in the number of unskilled non-farm laborers is also expected during the 1970's. All of these changes in occupation size reflect the increasing need for scientific and technical skills and competency resulting from rapid technological development.

The need for skills and competency in the labor force will increasingly be reflected in the level of educational attainment. In the 1960's there was a significant increase in the size of the relatively well educated segments of the population, and this trend will continue at a faster pace during the 1970's. There has been and will continue to be a rapid decline in the number of people with only an elementary

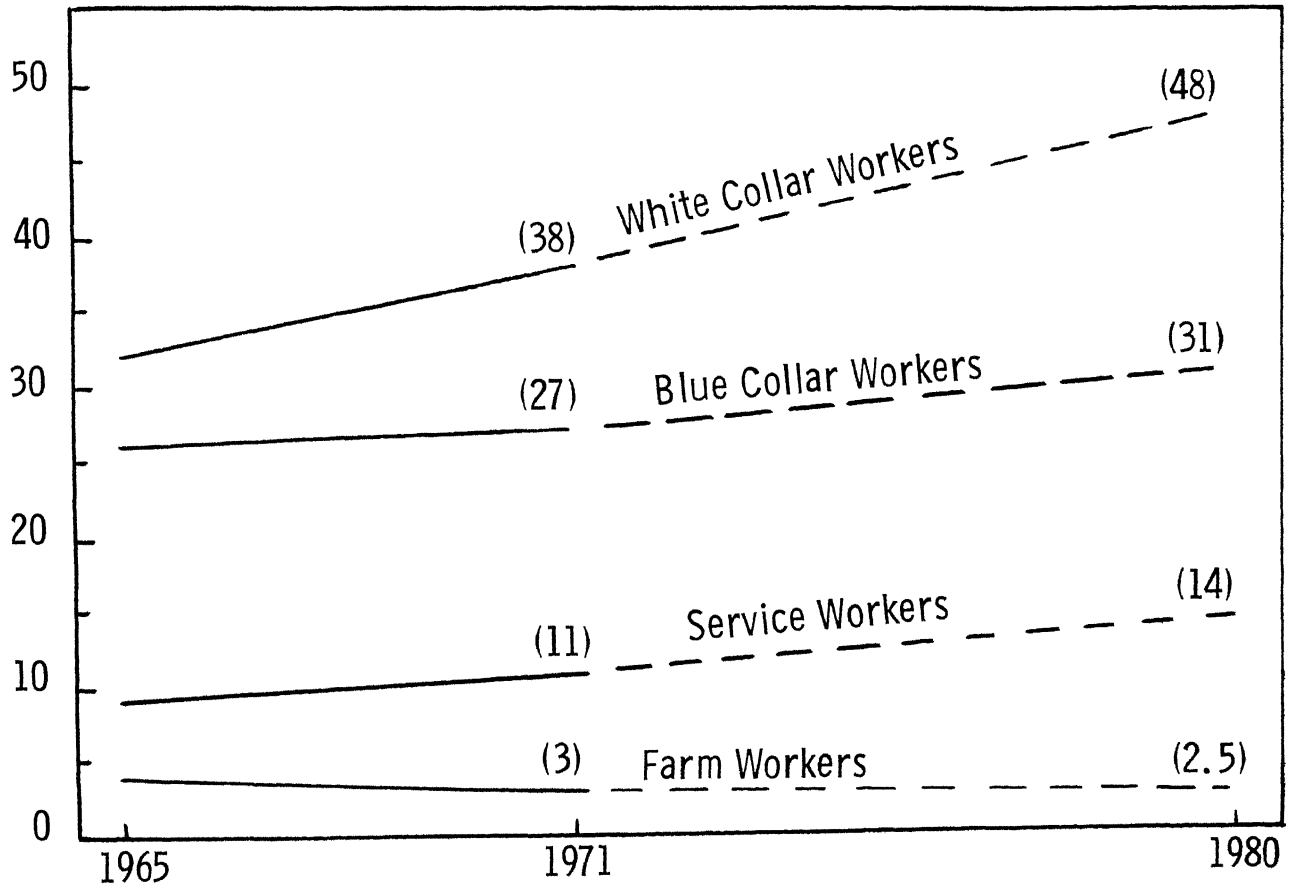
school education as this group of mostly older persons is replaced in the general population by younger, better educated persons. In 1960, just slightly more than 40 percent of the entire population aged 25 and over had completed high school. By 1970, this was up to 55 percent, and by 1980 it is expected that about 65 percent of this age group will have at least a high school education. In 1960 there were only 8.2 million college graduates. In 1970 this increased to 12.3 million and by 1980 should include more than 18 million persons. While the growth in the number of persons with some college or technical school training was relatively slow during the 1960's, this group is expected to increase rapidly during the current decade in response to the increasing need for technical competency in the work force.

Even though the educational level of the population will increase significantly during the 1970's, total school enrollment is expected to level off at about 60 million, close to the present level of about 59 million. Enrollment in kindergarten and elementary school is expected to decline about 10 percent from the 1970 level during the 1970 decade, reflecting lower birth rates and the overall drop in the expected size of this age group in the population. High school enrollment is expected to increase at a somewhat slower pace in the 1970's compared to the previous decade as the share of the high school aged population not enrolled in high school stabilizes at or near its current low level. The most dramatic change in the 1970's will be the rapid increase in enrollment in colleges and technical schools. The number of students enrolled in higher learning institutions is expected to increase by about 5 million, or over 40 percent, during the decade. Much of this increase will be in the professional and technical schools.

In the decade of the 1970's, as in the past, some sectors of the economy will grow more rapidly than others. Charts 18-20 are based upon data from the National Planning Association and identify expenditure categories that will likely grow at an above-average rate between 1970 and 1980, consistent with the more basic changes in the economy per the previous charts.

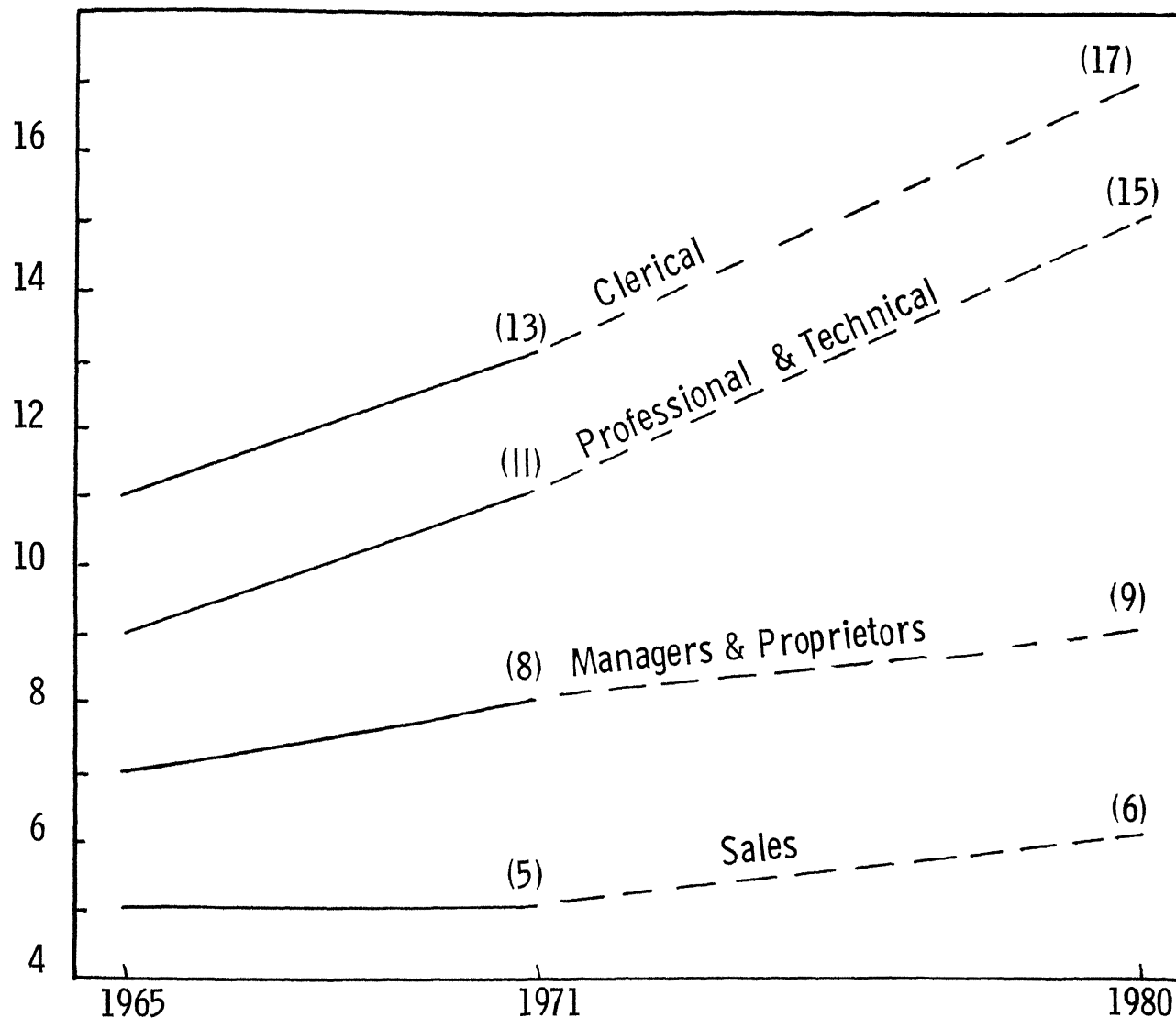
EMPLOYMENT BY OCCUPATIONS

Millions

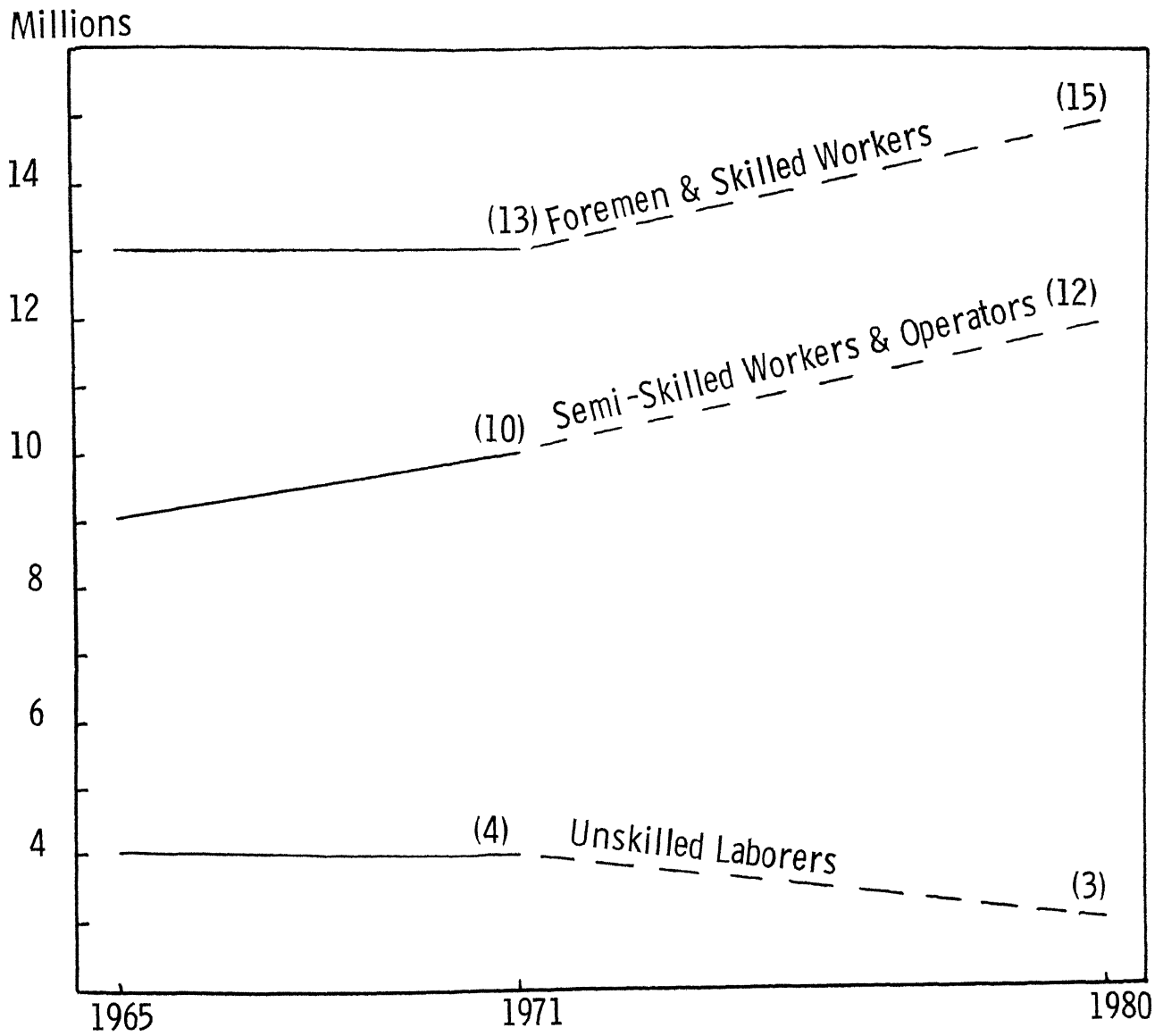


WHO THE WHITE COLLAR WORKERS ARE . . .

Millions

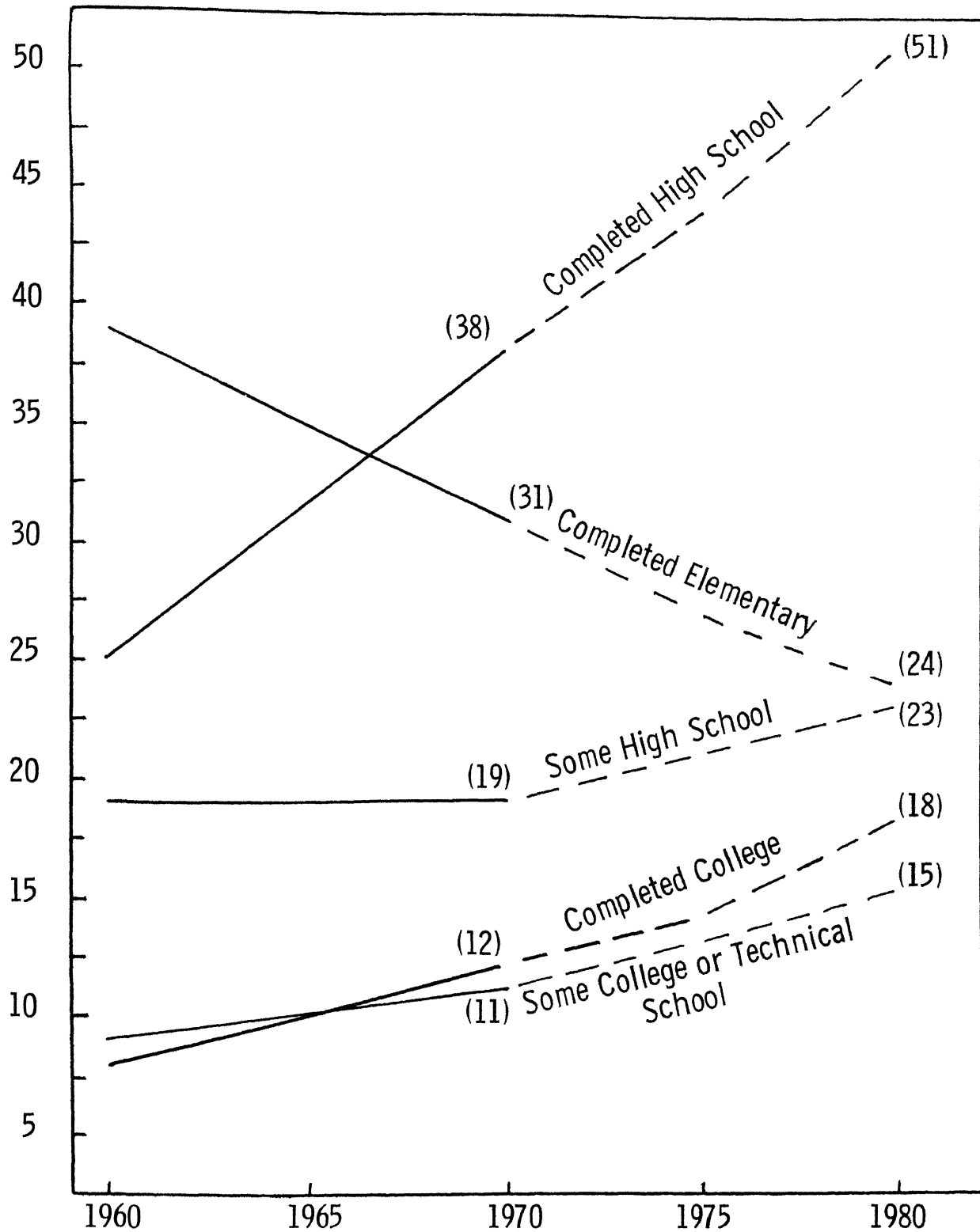


... AND THE BLUE COLLAR WORKERS



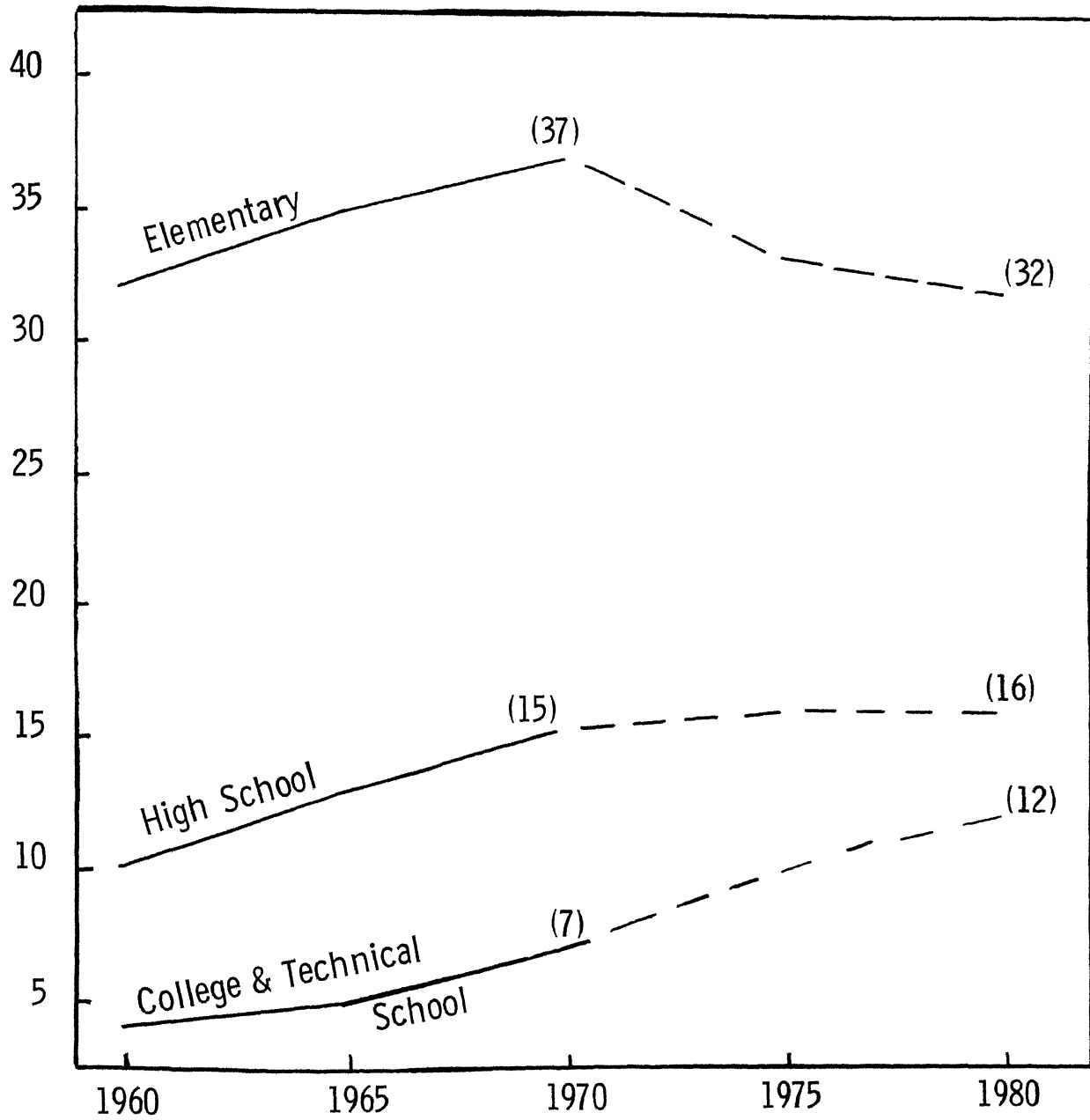
PERSONS BY HIGHEST LEVEL OF EDUCATION

Millions of Persons
25 & Over

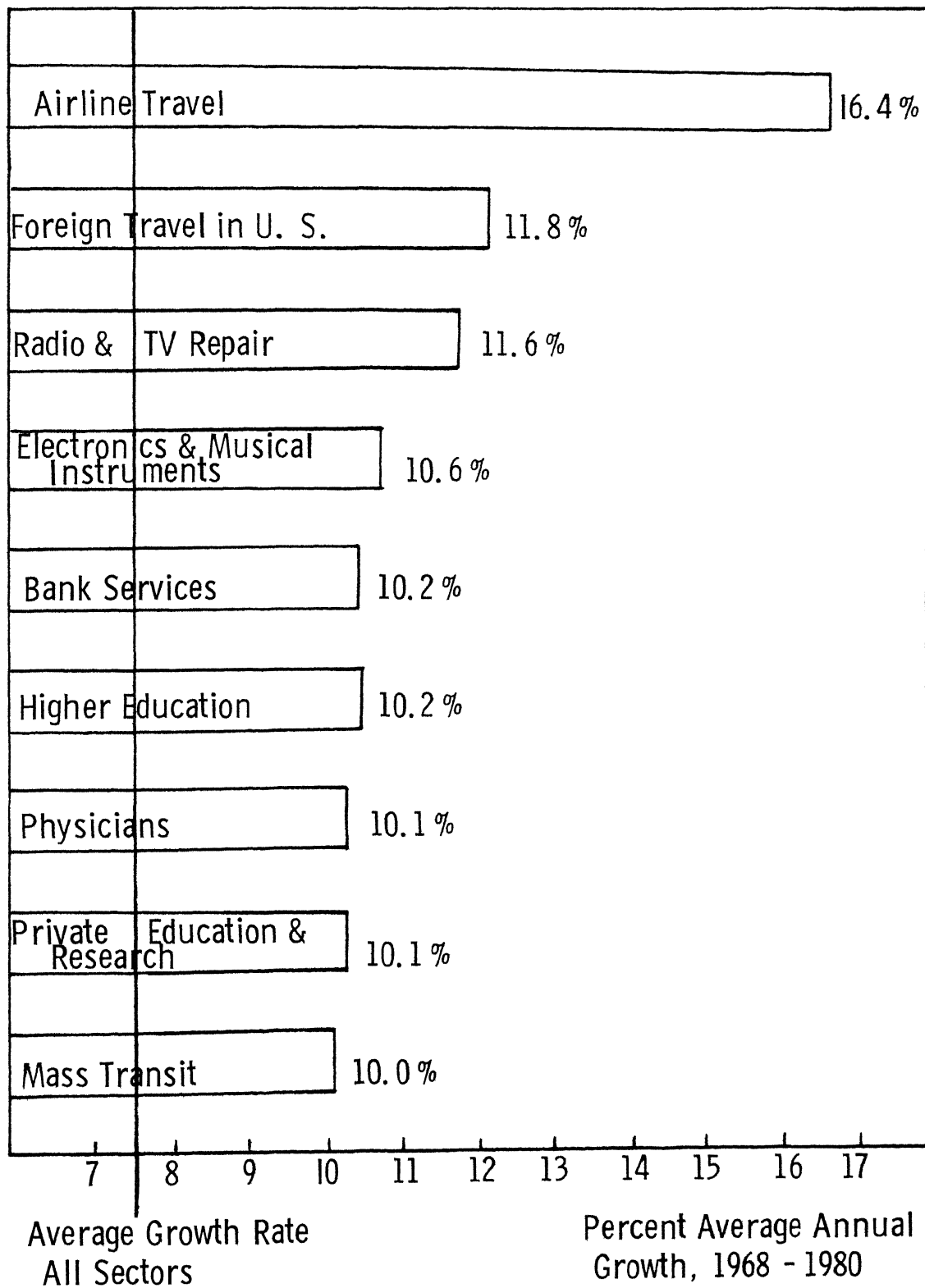


SCHOOL ENROLLMENT

Millions, Autumn



KEY AREAS OF ECONOMIC GROWTH, 1968 - 1980



ADDITIONAL KEY GROWTH AREAS . . .

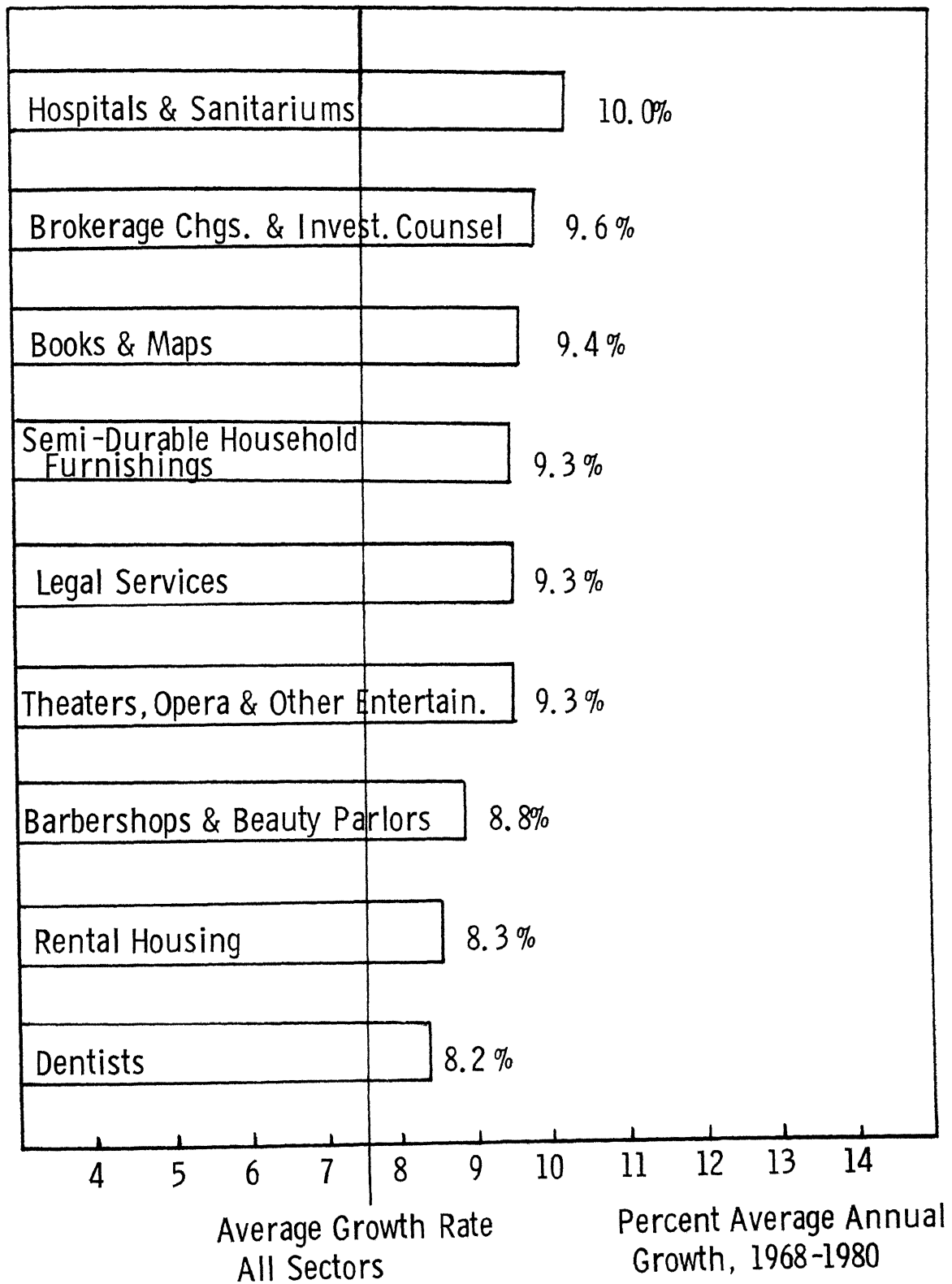


Chart 20

OTHER AREAS OF ABOVE AVERAGE GROWTH...
1968 - 1980

ENERGY	9.8 %
HEALTH INSURANCE ...	9.5
TELEPHONE & TELEGRAPH.....	9.3
AUTOMOBILE INSURANCE	8.7
FLOOR COVERING.....	8.4
OWNER-OCCUPIED HOUSING	8.2
ALCOHOLIC BEVERAGES	8.1
WATER & SANITARY SERVICES	8.1
AUTO REPAIR AND PARTS	8.0
TOYS & SPORTING EQUIPMENT	7.8
DURABLE HOME FURNISHINGS	7.8
ELEMENTARY & SECONDARY SCHOOLS	7.8
FOOD A WAY FROM HOME.....	7.7
TOILET ARTICLES & REPARATIONS	7.7